BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

In the Matter of:
DOCKET NO. UNDOCKETED

2023 HURRICANE SEASON
PREPARATION BRIEFING BY
FLORIDA ELECTRIC UTILITIES.
_____/

PROCEEDINGS: COMMISSION WORKSHOP

COMMISSIONERS
PARTICIPATING: CHAIRMAN ANDREW G. FAY
COMMISSIONER ART GRAHAM
COMMISSIONER GARY F. CLARK
COMMISSIONER MIKE LA ROSA
COMMISSIONER GABRIELLA PASSIDOMO

DATE: Tuesday, May 23, 2023

TIME: Commenced: 9:50 p.m.
Concluded: 11:54 a.m.

PLACE: Betty Easley Conference Center
Room 148
4075 Esplanade Way
Tallahassee, Florida

REPORTED BY: DEBRA R. KRICK
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P R O C E E D I N G S

CHAIRMAN FAY: All right. Let's get started here this morning for our workshop.

Welcome to the 2023 Hurricane Season Preparation.

Staff, please read the notice.

They are not working? Okay, go ahead.

MR. IMIG: By notice issued on --

CHAIRMAN FAY: Wait, Mr. Imig, try your button again. Go ahead now. Great. Thank you.

MR. IMIG: By notices issued on May 9th, 2023, this time and place has been set for a hurricane season preparation workshop. The purpose of this workshop is more fully set out in the notices.

CHAIRMAN FAY: Great. Thank you.

All right. Commissioners, we have a number of speakers this morning. Just -- I just have a few quick comments and then I just would hope the floor if any of you have any comments before we get to each individual presenter.

So as we know, we do this workshop every year, but this year we are able to include a wide range of utilities, but also a telecom provider, as that's becoming more and more of a topic for our state as we manage these storms.

I think we all have probably mentioned here before that Florida does a great job of responding to damage and resiliency and restoration, and I am fortunate enough to be involved in NARUC where, in our critical infrastructure committee, we talked about that. Florida is really a model for what other states look at, but I also think we can't be complacent in what we do to prepare and move forward. So thanks to all the utility and companies being here today to provide this information.

With that, Commissioners, any comments before we start into presenters? Seeing none.

We will first start with Andrew Pankratz this morning, from Florida Power & Light.

And the presentations that we have that you submitted, you will be able to go through them. And as we move from one utility to another, they will just flow right into the next one, so you can just click on to that next slide and it will start up for the next presenter.

So with that, Mr. Pankratz, you are recognized.

MR. PANKRATZ: Thank you, Chairman and Commissioners and staff. It's a pleasure to be

here today.

As mentioned, my name Andy Pankratz. I am Senior Director of Emergency Preparedness for Florida Power & Light. I have been with FPL for -- I am in my 24th year. I responded to my first storm back in 2001. Certainly, things have changed a lot since then.

I started my career as a protection and control engineer in the field, and spent the bulk of my career in our transmission control center. Most recently, three years running our distribution control center, and then I have spent the past year in our emergency preparedness group. So again, it's a pleasure to be here today.

Just a quick reminder of Florida Power & Light's area. We cover about 5.8 million customers. About half the state. Primarily the east coast south of Jacksonville, the southwest coast south of Tampa, and now the Panhandle.

One of the key challenges we've had with our service territory is the vast majority of our customers, over 80 percent live within 20 miles of the coast, and we've got over 600 miles of coastline.

I will speak to a variety of topics today with

regards to what we are doing to ensure we are ready for this upcoming storm season. What we have been doing to prepare. How we communicate to our customers and encourage them to prepare, both before and after an event. Where we stand with our vegetation management and pole inspection programs. And then some lessons learned from the 2022 storm season that we are looking to apply to this storm season.

So we often say if we are not responding to an event, we are planning for one. So we -- it's an annual process for us to plan for storm season. And quite possibly, the most important event we do is our annual storm dry run that was held about a month ago, back in April. This year we simulated a Category 4 storm making landfall in southeast Florida.

We use that opportunity to bring in our partners that we use during actual storms, local law enforcement, Florida Highway Patrol, Florida Department of Emergency Management, and many others that are our strategic partners whenever we have an actual event.

We also evaluate and update our processes, and even sometimes roll out brand new processes for

storm season. Some examples are the refinement of our storm damage model.

This year, we did a full test of our new resource management tool that's rolling out this year. And then, of course, our drone program just continues to expand each and every year.

Everyone in our company has a storm role, and this is a great opportunity for them to exercise that storm role, because they are often very different than their everyday jobs. So that dry run allows them to -- to challenge themselves with the training they've received throughout the year and actually put it into practice during that -- that event.

We also work with industry organizations. We are active EEI, the Southeast Electric Exchange. We are making sure we've got our contracts and agreements in place with our vendors for storm response, and making sure we are sharing best practices with -- with our partners there in those committees and those organizations.

Communication is critical to a restoration effort. We've got annual TV and print ads that we roll out to our customers for preparedness. Not only to let them know that we are preparing, but

also to let them know that we need them to make sure that they are preparing as well for a -- for a storm. We've got over 30 ways we communicate out to our customers. We -- we bring folks in, media folks into our command center during events. Post-storm, we will bring media and reporters out to heavily damaged areas, so they can see firsthand what we are dealing without in the field after an event. We've got targeted ads from our -- also on our website, our mobile app as well.

We do hold daily press conferences following an event. And lastly, we will set up community response in those hardest hit areas with our -- our customer service teams. We may roll out our mobile command center or community response vehicles out to the hardest hit areas, so customers have someone they can speak to face-to-face and get -- get realtime updates.

Post-storm communication as well for our estimated time of restoration. Within the first 24 hours, we will -- we will provide a general ETR for the restoration effort, and then we will continue to refine that down throughout the effort. So at the 48-hour mark, we target getting down to the county level, and then at the 72-hour mark, down to

the subcounty level. It's critical for us to give our -- our customers the most accurate information.

We also work with our community partners every year. We -- we attend EOC meetings every year, go through the commun-- the critical infrastructure list for those local communities to ensure that we've got -- we are on the same page for what the critical needs are for those local communities.

We perform over a thousand presentations throughout the state and within the community to -- to discuss our readiness, and to also ensure that we are, again, requesting our customers to make sure that they are ready as well.

In addition, we include information on our website regarding safety. So from generator safety, or how to operate solar equipment after an outage, we want to make sure our crews that are out there working are safe, and we don't have any issues with backfeeds onto the grid.

As you can see by the numbers here, we've got a robust vegetation management program, but customers also play a big part of that. The Right Tree, Right Place campaign is still a huge part of what we do, making sure we are -- we are reducing the probability of an -- of an outage from a tree

or vegetation.

Some numbers for year-end 2022. Our feeders are on a three-year cycle, and we trimmed over 15,000 miles of feeder. Laterals on a six-year cycle, over 4,000 miles of lateral. And on the transmission side, our right-of-way, we patrolled and trimmed over 9,000 miles of transmission.

As far as pole and structure inspections on the distribution side. Like our vegetation management program, very robust. We're on an eight-year cycle on the distribution side. In 2022, we inspected over 190,000 distribution poles. Almost 18,000 of those were concrete, and over 172,000 of those were wood poles.

On the transmission side, six-year cycle for wood, 10-year cycle for concrete. Last year, over 82,000 structures.

I would like to note last year was a big milestone for us at FPL on the transmission side. Our legacy FPL, we removed our last wood structure. So our -- our legacy FPL is all concrete or steel now on the transmission side. And we've certainly turned our focus on the northwest area to do the same -- the same program up there, and remove all of the wood transmission from the northwest area as

well.

Now, I would like to talk a little bit about the 2022 season. Obviously, we had a couple of large storms hit our service territory, Hurricane Ian in September, Hurricane Nicole in October. We also supported several of the utilities for winter storms earlier in the year, and then even in December. We won an EEI recovery award for Ian. Also, EEI response awards for our 2022 season support for other utilities. We were recently nominated for a Nicole recovery award as well.

We know we are going to need help, and we are always willing to help others whenever they need help as well. It's one of the hallmarks of our industry, and one of the things I am most proud of being a part of this industry.

So looking at Hurricane Ian, a strong Category 4, major hurricane. 150-mile per hour winds with significant storm surge. That storm impacted over two million of our customers. It was the strongest -- the fifth strongest U.S. landfall, and fourth strongest Florida landfall.

I was around for Hurricane Charley. This graphic, to me, really puts Ian in perspective when you see Charley fits in the eye of the Ian. Those

were both Category 4, 150-mile per hour storms that made landfall very close areas to each other.

Six weeks later, Hurricane Nicole made impact -- made landfall on our east coast near Vero Beach as a Category 1 hurricane. This was the latest hurricane landfall in history for the Florida east coast, and one of three hurricanes that formed in November. That's tied for another record.

Both Ian and Nicole were devastating storms. We saw the significant storm surge on the west, the flooding on the east coast, and the erosion from Nicole. It really created some challenging conditions for our crews to work in, and we got creative with some of those difficult conditions.

We used barges to -- to move trucks and any equipment and material to areas we couldn't access via land. We had water intrusion above our equipment in our vaults. We had cars in vaults. We had boats in our lines. So certainly some changes we hadn't dealt with before that we had to overcome.

We mobilized a significant support workforce for both storms. All in, approximately 21,000 men and women supported Ian with help from -- I am sorry, with about 38 sites for processing, staging

and parking those resources.

For Nicole, all in, about 13,000 men and women supported, with 11 sites for processing, staging and parking. And we received support from throughout southeast and beyond to help us restore. We had support from over 30 states -- actually, 30 states for Ian, and 16 states for Nicole, to help us respond.

Logistics were also critical for our restoration efforts. And my hats are off to our logistics teams. When you look at some of the numbers here, over half-a-million meals served, 2.7 million pounds of ice, over three million bottles of water, and almost two-and-a-half million gallons of fuel. That's no small undertaking. And that was a significant effort. And that team did a fantastic job.

Investments in the grid are absolutely making a difference. As mentioned, over two million customers were impacted by Hurricane Ian. We had over two-thirds of those customers -- customers restored after the first full day of restoration. Three-quarters of our customers were restored after the second full day of restoration. And all customers that could safely receive power were

restored in eight days.

For Hurricane Nicole, over half-a-million customers were impacted, or close to half-a-million customers were impacted. And we were essentially restored with all those customers that could physically receive power within 24 hours of Nicole exiting the state of Florida.

In addition to our -- our storm hardening investments as part of the Commission-approved storm protection plan, those were a major factor. We also had our pre-staging strategy worked out very well throughout our service territory, with our hardened facilities allowing us to get our resources out to the heavily damaged areas right away and start restoring, and -- and also doing our patrols and assessments of the grid.

We also work around the clock. We've got a robust team that works throughout the night. We utilize not only our FPL employees, but our embedded contractors that are familiar with our territory to do night work to continue that restoration effort 24 hours a day.

Smart Grid devices are also making an impact. We've got our automatic feeder switches, automatic lateral switches, automatic transformer switches,

fault current indicators. For example, they are allowing us to restore customers quicker, but also avoiding outages for customers. So we had over 400,000 outages avoided during Ian, and over 150,000 outages avoided during Hurricane Nicole.

So I would like to highlight a few areas that went well.

Our substation monitoring program continues to work well. That was a lessons-learned from Super Storm Sandy in the northeast. So we've got flood monitors at our flood stations that we, again, used -- utilized those last year in the storm season to proactively deenergize substations that were flooding. That allows us to restore much faster as the floodwaters recede without having to replace damaged equipment.

Every year we plan for a Category 4 or higher with our inventory. I am happy to say we had no inventory challenges last year, and were actually able to support some of our -- our neighbor utilities with some of the equipment that they needed.

In most cases, we met or exceeded -- we met and, in most cases, exceeded our estimated times of restoration.

As mentioned, our transmission grid in this area was all concreted or steel. We had zero transmission structures impacted by either storm, which really helped us focus on the distribution side for restoration. That was a big help in our effort, and went very well.

We significantly improved our presence in the field with our customer advisory teams getting, again, folks out into -- out into the heavily damaged areas so customers had someone they could speak with every day to understand what was happening and what the status was.

And then finally, our first deployment of FLPAir One, our fixed-wing drone, made its it maiden voyage for storm response during Hurricane Ian. Hats off that team as well. We live-streamed the Air One feedback into our command center.

Every time that drone went up in the air, we had a new idea of what we wanted to see. For example, overlay of streets. The next time they went up, there were the streets overlaid. And we asked for our grid to be overlaid on what -- on what the Air One was showing us. The next flight, there was our grid.

So that continues to evolve, and just really

excited about, you know, what that drone is going to do for us in the future with our ability to patrol following a storm.

We always look at lessons learned, not only during a real storm, but also during dry run. Ian and Nicole were no different. Those were of two arguably our best restoration efforts, and we have a laundry list of items that we want to improve on.

Some examples of those, we want to review vault designs. How can we better secure some of our underground equipment to make sure they can perform better during -- during surge or flood conditions?

We have over 100 staging sites predetermined throughout the state that we utilize during storm events. We did have some flooding issues on the west coast, so we are reevaluating those sites to see if we need to either take action at those sites. Do we need to pave or do something there to help with flooding, or do we need to identify some additional sites in the area that we can utilize.

Also, communication was a challenge in certain areas, at hardest hit areas. We do -- we were able to utilize from the state some Starlink units. Those worked very well. So we are continuing to

evaluate new technology that we can use for our communication out in the field to be able to bring that back into our command center.

And finally, my last slide here is just a big thank you. We certainly did not do this alone. I want to thank all those that helped support us. Our in-state employees, our in-state contractors, out-of-state folks that came and supported us, Highway Patrol, local law enforcement, all those folks that helped us get through and get Florida back on our feet, but also restore all of our customers.

And with that, that's the end of my presentation. I want to thank you and happy to take any questions.

CHAIRMAN FAY: Great. Thank you, Mr. Pankratz.

Commissioners, we will take any questions for Mr. Pankratz with Florida Power & Light at this time.

I just have a quick question for you on the supply side. I think it's slide 17, you got the pre-storm equipment inventory part of it.

I was just curious, I know there has, you know, been discussion in the past that you have all

of this preparation, and as a large utility, you are able to have a descent amount of backup supply for things that you need. It's really a two-part question.

The first is, is the supply chain issues and some of the things we saw historically during the pandemic, and that type of a thing, is that -- is that more on the risk of a second storm that comes fairly quickly behind a first storm? In other words, it sounds like you -- your supply is ready for that initial response, but then refilling that -- that pre-storm kind of backup, is that -- is that something that you look at?

MR. PANKRATZ: We do. Like I -- as I mentioned, it's -- it's, at minimum, a Category 4, often much higher what we are looking for.

An example last year was we had, you know, a Category 4 storm with Ian followed by a Category 1 storm with Nicole, and did not have any issues. But of course, that is -- that's always a concern to backfill that -- that equipment.

There is -- there is processes for us to do that, a material mutual assistance, for example, is something we could potentially utilize if we needed to.

CHAIRMAN FAY: Great. So you have other sort of other options and resources other than just --

MR. PANKRATZ: That's correct.

CHAIRMAN FAY: Yeah. Okay. Great.

And -- and the other is I think about the supplies that you have available. If -- if we are -- we are fortunate enough not to have a large storm hit for a cycle, are -- are those supplies that become dated fairly quickly or are they things that, over time, can still be used in response to storms?

And I only sort of jokingly mention this, but I think of, like, every time I go to Costco, right, I buy, like, the really large thing of, you know, ketchup, right, and two years later, like, I still have the ketchup there and it's not good anymore. Like, do you have assets that have timelines that they essentially you would not be able to use them after a certain time period?

MR. PANKRATZ: I would say we go through enough inventory with all of the efforts we are doing with -- with hardening and other -- and other things. So that's part of the plan. We do have a plan to deploy material that was not utilized during a storm as soon as storm season ends, that

it does get deployed out into the field and we replenish that accordingly. I don't believe that we have any concerns there.

CHAIRMAN FAY: Okay. Great.

Commissioners, any questions?

Yeah, commissioner La Rosa, you are recognized.

COMMISSIONER LA ROSA: Thank you, Chairman.

And great presentation. Much appreciate the time.

It seems like flooding was maybe kind of, you know, a new take away from this -- from this storm that maybe we hadn't experienced in previous storms.

Specifically your Air One, it's really an asset, right, to be able to get out there, and like you are saying, every time you guys deployed it that there was something new and different. Is this something that you guys would utilize maybe in territories that -- that is not an FPL territory but maybe a neighboring electric company might -- might need to use it? I am assuming that you may be the only one that has a machine like this.

MR. PANKRATZ: We do. That's a great question. That has come up several times. We are

-- we are looking at that, the opportunity to be able to leverage that technology to help others as well. It's something we are certainly looking into.

COMMISSIONER LA ROSA: Thank you.

CHAIRMAN FAY: Great. All right. Commissioners, seeing no other questions for Florida Power & Light, we will move into our next presentation. We will have Geoff Haslett from Duke Energy provide an update.

Mr. Haslett, I think your -- and if you hit the next button, you should be on your -- your proper slide there.

You are recognized.

MR. HASLETT: Thank you.

Good morning. I am Geoff Haslett with Duke Energy. I have been with the company for a little over 16 years now. I have held various craft leadership roles throughout our power generation organization. I have worked as a control room supervisor within our Florida Distribution Control Center. And then most recently, Manager of Emergency Preparedness. It is a pleasure to be here this morning and present on behalf of Duke Energy.

A little background on Duke Energy Florida. We serve approximately 1.9 million customers throughout 35 counties. We have -- our service territory spans nearly 13,000 square miles. We have approximately 5,200 miles of transmission lines, 18,000 miles of overhead distribution lines and 14,000 miles of underground distribution cable. We have the capacity to produce nearly 11,000 megawatts of electricity throughout our fleet of 22 generating sites.

So we prepare for all types of events year-round. Outside of our annual storm drill, we have a plethora of annual readiness activities that we focus on to ensure we are prepared to respond. A few of those include our critical customer list review. So each year, we capture a list of all of our critical customers to ensure that we have a prioritized list of any restoration needs that might occur. That is also fed into our critical customer list -- critical feeder list, I am sorry, which is a fool tool that is used within each ops during restoration.

We assess all of our business continuity plans to ensure any lessons learned or updates that have occurred from the prior storm season. And we kick

off our annual retiree recruitment process. We review all of our staging sites. We have approximately 70 staging sites throughout our DEF footprint. And each one of those are physically assessed prior to storm season to ensure it is ready to be activated.

We also provide mid-level training. And then lastly, everyone at Duke Energy has a storm role. So prior to storm season, we ensure that everyone knows what their roles and responsibilities include, and that they are ready to respond.

DEF conducted a three-day storm drill this year, an overview of that. We reviewed our incident management team. That gave everyone a better understanding for the storm role that they have and how they fit into the overall restoration process.

Our finance section chiefs reviewed storm charging guidance for what can and cannot be charged to storm accounting.

We also provided training for all of our storm response tools. So our damage assessment tool, our resource time and exception tracker, recruit tracker, and then all of our estimated time to restore calculators.

Our meteorology team gave an in-depth overview of the 2023 season projections. We went through the process of activating and assigning resources to our staging sites. Transmission and distribution worked through a joint effort ETR campaign, and the communication strategies through our public information officer. And then we also reviewed the mobilization and demobilization process.

So how does Duke Energy restore power during an event?

Public safety and critical infrastructure are our top priorities during any restoration effort. We dedicate several of our Duke Energy bucket trucks to any impacted EOCs during an event to ensure rapid response to critical infrastructure.

During the initial days of -- during the initial day of restoration, we will primary focus on our largest devices first. So most of our critical customers are off of our feeder backbones, therefore, we try to get those reenergized as quickly as possible. We will also factor in customer duration if restoration does begin to span across multiple days.

And customer communication is one of our

primary focuses during any restoration. We will often send specific outage communication through our outbound messaging platform that could be used to inform customers of any restoration delays due to severe circumstances or flooding.

And lastly, crew efficiency is vital to the restoration process, so all of our storm processes ensure that one group does not hinder the work of another.

Duke Energy Florida has completed a significant amount of storm hardening throughout our system, and we have seen that pay dividends for both large and small scale storms. When we look at the storm hardening process, we install sectionalizing devices based on the criteria of 400 customers, three miles of line, two megawatts of load.

We currently have around 63 percent of our customers on automation, and nearly 48 percent on self-healing grid. By the year-end 2025, we anticipate having 100 percent of our customers on automation, and nearly 80 percent on a self-healing grid.

As I previously mentioned, these smart devices add a great deal of resiliency to our system.

During Hurricane Ian, our grid self-restored nearly 166,000 customer outages, and saved approximately 196 million customer minutes of interruption.

During Hurricane Nicole, our grid automation self-restored nearly 55,000 customer outages, and saved nearly 13 million customer minutes of interruption.

During Hurricane Ian, we had over 9,000 resources out in the field restoring power. A large number of those resources were acquired through our mutual aid agreements. We are an active member of the Southeastern Electric Exchange, the Edison Electric Institute, the Florida Coordinating Group, and then we have numerous annual contracts for line vegetation management, logistics and damage assessors.

During an event, if additional resources are needed, we will first turn to our partners in the Carolinas and midwest. If they are not impacted by the same weather system as we are, then they can often send us a complement of their resources to restore power here in Florida.

We will also engage our native line and VM contractors who perform work for us on blue sky. And then lastly, if additional resources are still

needed, we will then turn to one of the mutual aid agencies for further support.

The picture on this slide shows our material lockers. We have 17 sets of lockers -- 17 sets of 10 lockers that are staged strategically throughout or DEF footprint. On blue sky days, our crews will utilize this material as working stock within their op centers. And this does help to ensure that the material stays within our current work standards, and also maintains the adequate shelf life.

During times of red sky, the lockers will be completely restocked, packaged up and deployed to a neighboring staging site.

Each operation center also is supplied with backup storm kits, which then they will bring down and package, and can be used for any crews working out of that op center.

We have a guaranteed 90-day supply of all the materials that are kept in those lockers. And the decision for what components to put in those lockers is based on data collected from prior storms of our high usage materials.

And then we also have a separate inventory for our larger materials for both blue and red sky. Our red sky materials would not be used for daily

work activities.

So a big piece of our annual readiness includes meeting with each county EOC prior to storm season commencing. As we have seen in prior storms, that constant flow of communication out of the county EOCs and into our storm rooms is what makes restoration successful.

We also partner with many EOCs throughout the year to work through internal drills of their own. An example of that would include a recent drill that we held with Orange County that was a power restoration event that we worked in tandem together.

And the picture of this on this slide shows one of our live line and safety demos that we held with Pasco County utility workers earlier this year. And those types of events are available to any county upon request, and it a gives us an opportunity to share some of our safety best work practices with other utility workers.

So we want to always ensure that our customers are just as prepared as we are. We use several different communication mediums to communicate this information. First, we will issue press releases to inform customers of an approaching weather

system. We will also communicate with our customer -- customers through social media. And then we have the ability to -- for direct customer communication, which allows us to send more specified communication to individual customers, or a large group of customers.

So what happens after the lights go out? So customers will first receive an initial out campaign letting them know that we are aware of their outage.

The second notification they receive is an estimated time to restore campaign. This is where they will receive most of their information related to the cause of the outage, the crew status, and any updates to their estimated time to restore.

And then lastly, customers will receive a restoration campaign once their power has been restored. This gives them the ability to respond to a text message if they are still out of power, and then that information is fed into our outage management platform.

The third-party attachers, so we have approximately one million poles throughout our distribution system. Nearly 80 percent of those have a third party attachment. And a little over

one-and-a-half percent of those include poles owned by other utilities where our distribution wire is attached.

During blue sky, we will work through our work management system, our work management process, to coordinate with a joint use affiliate to schedule any necessary repairs. We also maintain after hours phone numbers so we can quickly respond and communicate with third-party -- third-party affiliates during any emergent restoration needs, such as vehicle accidents, et cetera.

During read sky, we will make an attempt to contact the joint use affiliate. However, if that contact is unsuccessful, we will go out and make any necessary repairs in order to restore power. That process does not impact our ability for restoration times. And then we will then work with the third-party attacher during times of blue sky for any cost alignment that might be needed.

For our distribution and vegetation management program, we trim our feeder backbones on a three-year cycle, and all of our laterals on a five-year cycle. We ensure that all of our annual hurricane hardening is completed by June 1st of each year.

During 2022, we supported vegetation management work for nearly 8,500 customer requests, 7,300 new design work orders, and we removed nearly 14,000 trees that caused threats that could cause potential threats to our distribution system.

For our transmission vegetation management program, a slightly different approach than what we used on a distribution side. It's more of a data-driven approach. Threats are identified through patrols, inspections and assessments. And this typically allows for a six-year regrowth cycle, and supports all of our minimum safe work distances.

We use a LiDAR scanning technology, which can take measurements through vegetation growth to determine areas that need trimming. And LiDAR is an acronym for light detection and ranging. And during 2022, we trimmed slightly over 500 miles of transmission lines.

For our distribution pole inspection process, we inspect our distribution poles on an eight-year cycle. Last year, we inspected just shy of 160,000 poles, with less than one percent of those being priority ground line rejects.

For transmission, we inspect our wood poles on

a four-year cycle. Our steel, concrete and lattice towers are inspected on a six-year cycle. And last year, we inspected just shy of 1,400 wood poles and 3,300 structure towers, with less than one percent of our wood poles being priority ground line rejects.

So we perform an after action review for all of our major storms, including any of our internal drills. Our objective is to learn from our mistakes and make our processes that more efficient for next time around.

A few items from the 2022 storm season that stuck out at us includes the pre-staging of crews outside of the storm's path. So we want to always ensure that we get our resources turning wrenches as quickly as possible on day one of restoration. However, we also want to ensure the safety of our crews. So being strategic in the staging sites that we activate and finding that right balance of pre-staging prior to a storm.

The second, bussing transportation to and from hotels. So during Hurricane Ian, this was an issue that we ran into during -- down in Pinellas County. On day one of restoration, the busses would not travel due to high wind speeds, so we had to find

alternative ways to get our crews from the hotels back to their staging site. So looking at some other options for transportation.

The third, hotels versus sleeper trailers. We did conduct an in-depth analysis to better understand the use of hotel rooms versus sleeper trails. So you have cost versus wrench time, versus pre-staging of crews, and all of that factors into crew efficiency. So when does crew efficiency outweigh the added cost of sleeper trailers?

And the fourth, traffic conditions once roadways reopened. So this primarily came from our Lee County deployment. During the first few days of restoration, we did not have any issues with traffic and getting crews to and from the staging site. However, as people continued to get out and do their own damage assessment, roadways were beginning to reopen. Traffic conditions did hinder our ability to get the crews to and from the staging site efficiently. So looking at, again, some other options there, potentially staggering our start and stop times.

And then lastly crew rostering. So we are working toward a more efficient method for

onboarding our off-system resources. We currently have reduced a two-step process down to a one-step process. And then our goal is to minimize rostering errors on behalf of the vendor to ensure that it's easier for us to release the resources to either another utility, or get them headed home as quickly as possible.

I will stop there for any questions.

CHAIRMAN FAY: Great. Thank you.

Commissioners, any questions for Duke?

I have just got a few quick ones for you.

On Slide 11, you talk about the live line demo that you do.

MR. HASLETT: Yes.

CHAIRMAN FAY: I am really curious in that I know I grew up with storms, and even as a kid, you -- you walk outside your house after a storm hits to see what sort of damage there is, and I think there is probably a lot of uncertainty as to where people can and can't walk, and what those dangers are. Is that something that you see the counties accepting and, like, the request is out there that you provide this demo, but, I mean, how many respond and say that they see it, or are there other avenues that you can produce the demo?

MR. HASLETT: So over the past few years, we have seen a significant increase in counties requesting those live line and safety demos. We've had several requests lately, and it is very beneficial.

Our safety department goes out and does a presentation on if you see -- you know, how to respond if you see a wire on the ground. And then it also gives other utility workers, you know, a better understanding for some of our best practices.

CHAIRMAN FAY: Great. And do you do it outside of the county request?

MR. HASLETT: We have done them outside of our service territory.

CHAIRMAN FAY: Okay. Great.

The other question I had for you is you mentioned the LiDAR, on slide 16, for the vegetation. Just -- you don't need to go into all the sort of details of that or anything proprietary, but just in general, help me understand how you -- so utilities sort of visually would assess a vegetation issue on a line previously, does the LiDAR make that process easier or faster?

MR. HASLETT: So I am not in the transmission vegetation program, but we do ride out all of our transmission lines each year, and the LiDAR technology helps us for those that go through swampy areas that are more difficult to access. So a combination of patrols in person, and then the LiDAR technology is how we identify threats.

CHAIRMAN FAY: And that's typically something -- and you may not know this -- on a ground vehicle that's provided, or is it something also done --

MR. HASLETT: I would have to look into that and get back with you.

CHAIRMAN FAY: Okay. Great.

And then the last question I had for you is on slide 19, you had some information about the pole inspection cycles. And I know that's pretty standard, as we see that, your cycles on the wood pole.

On the transmission side, as utilities shift to the steel and concrete, it says it's a six-year cycle on those poles. I was just curious if there -- I know there is a sound and bore test for the woods poles for -- is there some equivalent on the steel or concrete poles? I mean, how are you -- how are you testing those? Does that take a long

time? And is it something where typically a visual is sufficient to say that pole is -- is not probable particular and you are able to move on?

MR. HASLETT: So we -- we inspect our -- our wood poles are inspected on a four-year cycle. And then the lattice towers, concrete and steel poles are inspected on a six-year cycle.

As far as the sound and bore, I don't have that number with me, but I can look that up for you.

And again, I am not super familiar with our inspection process, but that is information I can get for you.

CHAIRMAN FAY: Okay. Yeah. Great.

I think -- I think, you know, I don't need a ton of detail on it. I just as -- as -- as we -- I mean, I think it's a success story when we hear from utilities, hey, on the transmission side, you know, the -- the lines are -- the poles are essentially concrete or steel. I mean, they have been -- been replaced. And so the distribution is a different story, but I think that's really key.

And so I think part of that you would think is it extends, sort of, inspection times for the poles because they are less likely to -- they have a

lower failure rate in general. But that might be an industry standard, and so, you know, you guys might be following something nationally that's been done. But yeah, any details that -- that you guys have that on that would be great.

And I think that's all that I have for Duke.

Commissioner, any -- any other questions for Duke? No, seeing none. Thank you so much.

We will move onto your next presentation, Mr. Ed Mora will be presenting on behalf of TECO.

You are recognized.

MR. MORA: Good morning, Commissioners. My name is Ed Mora. I am the Director of the Energy Control Center for Tampa Electric. My responsibilities include the transmission control room, the distribution control room, the trouble department, which also includes storm restoration. We are excited about sharing some of the things that we are doing that has us prepared for the upcoming hurricane season.

Tampa Electric's vegetation management program combines a continuation of our existing filed and approved distribution and transmission plan.

For distribution in 2022, we completed year two of a four-year cycle for feeders and laterals.

You can see we trimmed about 1,400 miles and removed 548 hazard trees. In addition to these miles, we performed vegetation management on 683 distribution miles as part of our storm protection plan.

For transmission in 2022, we are on a two-year cycle, and we trimmed 514 miles, and mowed over 6,600 acres of right-of-way.

In addition to vegetation management, we also perform wood pole inspections. Our wood pole inspection initiative is part of a comprehensive program initiated by this commission for Florida investor-owned utilities to harden the electric system against severe weather. Tampa Electric has approximately 311,000 distribution lighting wood poles appropriate for the inspections run in eight-year cycle targeted for distribution inspection, and we inspected over 35,700 distribution poles in 2022.

For transmission, our eight-year inspection approach includes the above-ground structure inspection, the ground line wood inspection, the annual ground patrol, the aerial infrared patrol, the preclimb inspection, and the annual substation inspection. You can see we inspected about 400

transmission poles in 2022. You will know that 130 of those poles failed its inspection criteria. That failure percentage rate is higher than the recent failure trend, and is taken in the context of an overall hardened system that consists mostly of steel and concrete transmission structures, about 87 percent.

Our proactive decisions, dating back to the early 1990s, to discontinue the use of wood poles has resulted in a hardened transmission system with only a small and dwindling percentage of older wood poles. Under Tampa Electric's storm protection plan, the company is planning to harden all remaining wood transmission poles by the year 2029.

Next we want to focus our conversation on our SPP hardening and reliability projects.

First, I would like to share that storm hardening efforts by Tampa Electric are making. Hardening is working. We are pleased to report for Hurricane Ian that we experienced zero outages as a result of failed assets that were hardened or undergrounded through SPP.

Our storm protection plan sets out a systematic approach to storm protection focused on those projects that provide the highest level of

reliability benefits for the lowest relative cost. 2022 was the third year of the company's 2020 through 2029 plan.

The program focuses on increasing the resiliency and the sectionalizing capabilities of the distribution electrical system to better withstand extreme weather and minimize outages, outage durations and affected customer counts.

In 2022, we hardened over 520 transmission structures by proactively replacing the wood poles with nonwood material, and replaced or upgraded over 1,100 distribution poles. Additionally, to minimize customer outage counts, we installed 38 three-phase reclosers and 200 single-phase reclosers.

As part of our grid modernization strategy in vision 2025 initiatives, we are striving to provide a more resilient grid that provide an always-on world class customer experience.

To establish robust communications between the distribution network devices and the energy control center, we have begun the design of a private long-term evolution known as LTE network. This network will enable distribution automation in the fault location isolation service restoration

control.

Additionally, part of the grid mod initiative is the design and construction of a new state of the art hardened energy control center. Our current ECC has reached its end of useful life as our grid control center, and is approaching 40 years old, using 1980s technology and building codes.

The new control center, when completed, will provide improved storm resiliency with a location that is 12 miles inland, and at a higher ground, and will enhance our ability to provide interrupted service to our customers, and we are targeted to move in in 2025.

Next I would like to discuss our storm plan changes and our mock storm.

Our automatic crew call-out and resource management software system is fully functional for assembling and tracking our internal and foreign resource repair crews as part of our storm restoration process.

Additionally, to improve our ability to handle a large influx of foreign crews, we have signed service level agreements with three turnkey logistics providers to implement base strategy.

That would include things like sleep trailers, on-site meals, laundries and showers.

In April, we conducted a cross-functional review with the internal business units and third-party providers at our five restoration locations that are utilized for storm restoration efforts, and our detailed base camp layouts have been produced and shared within the group to improve the effectiveness of initial deployment.

For 2023, a series of hurricane preparedness mock storm exercises were conducted internally in April and in May. The focus of the exercises was familiarizing team members with the procedures and exercise full activation of our logistics support unit and our unified command for both energy supply and electric delivery.

An exciting component of that exercise was the effort of our distribution control center and the storm restoration teams. A series of separate planning sessions were conducted to fine-tune our process in coordination with the restoration process itself. Examples of that would include the ETR team, wire down teams, and interfaces with our customer experience team and our key account representatives.

And finally, this year we are developing a communication strategy for amateur radio protocols and enlisting certified amateur radio operators within Tampa Electric to provide backup communication with all four counties served by Tampa Electric.

As noted in the last two years, another noteworthy improvement for storm preparedness and restoration for Tampa Electric has been the implementation of our advanced distribution management system, which the industry refers to as ADMS. Tampa Electric transitioned to the live cut over in April of 2021, and to an upgraded, newer version just this past weekend. The upgraded version provides improved functionality for switching orders and back office archive performance processes, and allows us to develop and integrate advanced applications, such as distributed energy resource management. And the ADMS also improves our reporting capabilities to our local emergency operation centers and for the Commission's purposes.

For our storm preparedness, we have also seasoned mutual aid agreements in place with many active decades of membership in the Southeastern

Electric Exchange and with the Edison Electric Institute. We also have agreements with municipalities within the state of Florida.

We have established business process across company affiliates and contractors to assist in processing a portion of the outage call traffic during electric service restoration, and we used this process successfully during the Hurricane Ian restoration.

Each year during this time we ramp up our stock on commonly used material for storm restoration. We call it 911 stock. In the event of a major storm response, we can lean on our Southeastern Electric Exchange mutual aid partners to address specific material needs, and we would manage the best we can to mitigate any potential restoration delays. Restoration for us takes priority over new construction and proactive storm hardening.

Each year we are invited to participate in a variety of communities outreach events to promote hurricane preparedness, and thus far, we have participated in events at the MacDill Air Force Base, the City of Oldsmar, Hillsborough County, Tampa Fire & Rescue, and other upcoming events.

And finally, we annually review our list of critical customers, and have updated our restoration priority list for 2023.

Our external communication templates have been prepared and reviewed for this year, which includes the pre-storm, the post-storm and generator safety.

We have our internal emergency operations center staffing plans updated for this year, and have enough resources to staff at each county and municipality served.

We consider one of the most important tools for hurricane preparedness is customer communications. We strive to communicate proactively with accurate and useful information.

For unplanned outages, we have three customer communication campaigns. First, proactive notifications. We acknowledge we are aware of a new outage, and provide any known information, including the initial time for restoration, the estimated time for restoration, the number of customers impacted, cause and status.

Second, the ETR update. We notify our customers if the ETR has been changed for more than two hours.

And third, restoration notifications. We

notify our customers when an outage has been restored.

All campaigns providing information out of the ADMS are sent to our customers according to their channel preference. That would be, like, call, text, email me, or do not contact me at all, and preferred language, English or Spanish.

We recognize that storm and outage events are stressful for our customers, and one way to assist our customers is to continue to communicate during these times. To enhance our customer interaction, we display continuous updates on our tampaelectric.com website for additional information. We have banner messaging addressing the weather and restoration efforts. Any available ADMS data is displayed on the map so customers can monitor their outages. They get updates information tray on the map, provides information how to text us, or sign up for outbound communication preferences. And we also place broadcast messaging to play at the start of our RVR to provide any important storm information.

And last, we review our lessons learned. We have added more field and dispatching resources to our wire down team to address life safety issues

promptly. And we have also updated our internal business processes for the wire down team.

We annually train our internal and external management teams to operate the incident bases and our base camps. And one of the recent lessons learned discussed at the Southeastern Electric Exchange Mutual Aid Conference is how safety orientation is provided during the onboarding process of foreign crews.

We implemented this remote mobile approach during Hurricane Ian activities, which allowed foreign crews to be immediately available for customer restoration upon arrival in our service territory.

As mentioned earlier, we have signed logistics contracts with three turnkey base camp providers, and we have completed the site review for all five of our locations.

And finally, the Tampa Electric outage map experienced intermittent technical issues during Hurricane Ian. A comprehensive assessment was created, which resulted in enhancements of the map with expected completion of June of this year.

And thank you for your time. I am available to answer any questions.

CHAIRMAN FAY: All right. Great. Thank you, Mr. Mora.

Commissioners, any questions for Mr. Mora and TECO?

I have just got one question for you. On page -- or I should say slide three, you have your transmission line inspection, and you have got number of poles failed there at about 130. And then when you look at the non-SPP replacements, it's about 191.

Do you have, is there -- is there overlap from poles that need to be done in the previous year? Like, how come -- how come those numbers, I guess, don't line up?

MR. MORA: Yeah, they overlap. So what happens is if they fail their -- their inspection criteria, then we send field representatives, our supervisors out to the field to take, like, another look at that particular structure. And then the will go ahead and prioritize, hey, is this a pole that needs to be completed, replaced this year, or is there something that can be put off until, like, next year? That's why it doesn't match up.

CHAIRMAN FAY: Okay. Great.

And then just anything in particular on the

effectiveness of the aerial infrared? Does that mean something that -- that obviously saves somebody from getting up into a helicopter and looking --

MR. MORA: For safety, and also it identifies any hotspots, any kind of hot connections either on the transmission system. We will also use it on the distribution system from time to time, and in our substations. So when do you that, you can find hotspots that you wouldn't see with the naked eye.

CHAIRMAN FAY: Okay. Great.

All right. Commissioners, any other questions? Seeing none. Thank you, Mr. Mora.

We will next move to Jorge Puentes from Florida Public Utilities Company. Your presentation should be next.

MR. PUENTES: Yes, it is.

Good morning, Chairman and Commissioners and staff. My name is Jorge Puentes. Most people call me George, so I respond to both, and that's perfectly fine.

I appreciate the opportunity you give us to share our storm preparedness initiatives with you. As -- as you know, FPU is the smallest IOU electric utility in Florida. We have a natural gas and

propane footprint, and we serve about 30,000 customers in the Calhoun, Jackson, Liberty and Nassau County areas. We have nearly 16 miles of transmission lines, and we have about 910 miles of distribution lines.

I will now proceed to explain to you our overview of preparation and restoration process. We divide this into three stages. The first stage is preparation, the next stage is activation and then the other one is restoration.

In terms of the preparation, we are a culture of preparedness, where we consider safety for our customers and employees first. We have -- in this preparation stage, we ensure that our emergency procedures are all in place and active. As a matter of fact, we have combined the northwest and northeast emergency procedures into one document so it's easier to follow by all of us.

We ensure that our working conditions in logistics and customer interfaces are effective, and we review our mutual aid agreements. We also do a hurricane preparedness drill, and it's planned to be done in June of '23, this -- in this upcoming month.

We focus on lessons learned from different

hurricanes, especially Hurricane Michael, which nearly destroyed our northwest division, and also Hurricane Matthew, who we had to evacuate our northeast division.

For both of these hurricanes, we have secured several improvements in logics, which we use to our advantage as we continue to prepare for the storm planning.

In terms of customer outreach, we have hurricane storm brochures, we make sure that our website is up to date, and we have public service announcements. We also ensure that our communications plans are in place.

And depending on the path of the storm, we will provide that kind of information to our employees, and also our customers. We ensure that our IT staff and customer care are engaged, and we ensure that any agreements that we have made with other contractors are in place and ready to execute.

Also, we ensure that our system inventory is up to speed and has all the inventory necessary to support the emergency in case it happens. However, we also rely on other electric utilities and mutual assistance companies that are able to help us out.

As you recall from last time, Hurricane Matthew, FPL was very instrumental in helping us with the material and resources during that time.

In this preparation, we also coordinate with our city, county and EOC and other utilities. We have ongoing communications throughout the company. And we participate in the Southeastern Electric Exchange mutual aid, as well as any agreements that we may have with some of the other municipalities. We currently have an agreement with OUC and JEA, who is also a provider of power to us, in addition to FPL.

We also participate in the Electric Edison Institute storm drills.

In terms of the activation, we, being that we are electric, natural gas and propane, we alert all of our different divisions, and we keep a storm watch and see where the path of the inventory in the path of the hurricane is going to be.

We ensure, again, that the inventory levels, we do visual inspections of our equipment, and make sure that fuel levels are checked, and continue to activate the procedure with storm watch.

We secure and contact our EOCs, and provide the necessary employees so that they are available

at each county when it's necessary. And we redeploy our call center resources across the state, depending on the path of the storm.

In terms of restoration, we use our tools to allow us to focus and organize ourselves. We use OMS and SCADA to prioritize the restoration. We take a look at the physical damage of what has happened, and we send, in advance, tree -- tree crews or any other contractors that we might have brought into the area to be able to clear debris and trees that are in our way of transmission, or substation or distribution lines.

The priority that we use is similar to what the other utilities use. We restore generation first our -- is our main focus, then the transmission, then we move down to the substations, and we ensure them -- bringing them back feeder by feeder, and then the laterals.

In terms of the restoration for priority of customers, we would like to focus on hospitals, police, fire, EOC, storm facilities, elderly care facilities. And then after that, the water, sewer plants, food and other retail restaurants.

Our digital communications efforts are displayed and talked throughout our website. We

have one landing page where our customers can go in and receive all the updates or information on the storm. We send them bill inserts, print ads, brochures. And this is, from the feedback that we have received from our customers, they appreciate this kind of information.

We also have now the ability to show our customers where the outages are occurring, and they are -- they also appreciate that. And we allow to post also our estimated restoration times whenever we have a good assessment of that.

In terms of the storm hardening plans, our vegetation management, we do a three-year cycle for distribution feeders, and a six-year cycle for laterals. Right now, we have completed five total cycles of feeder inspections, and a total of 2.5 cycles of laterals. The three-year trim cycle also includes transmission lines.

We are currently in the transition of moving from the three-year to a four-year plan for laterals and feeders, and we expect to implement that this coming year. This was approved by the Commission late last year, so we are in the middle of that transition.

In terms of our accomplishments of how much

distribution we have trimmed this year -- last year, 2022, we completed nearly 31 miles of distribution feeder trimming, as well as nearly 85 miles of distribution laterals. These numbers also include any hotspot trimming that gets done in the distribution.

In terms of the wood pole inspection, we have an eight-year pole inspection. We have completed 1.88 total cycles up to this point. And the transmission is also in the same cycle. We have a transmission inspection, which is done every six years. And then next year, we will be doing our detail transmission inspection.

The total poles inspected from the beginning of the eight-year cycle has been 23,629. That's about 88 -- 99 percent of it.

The accomplishments for 2022, we have done a total of 3,091 poles inspected. The failure rate of that was 2.04 percent, which is quite lower than when we initially started to do this, which was in the high nines, or close to 10 areas, percentage areas. 63 of these poles failed in 2022.

And I would like to make a little note. The poles replaced there says 157, and we have a new update which will be provided in our June filing of

our storm protection plan update. That number is 165 instead of 157 noted in there. And also, the other number of the poles that need to be replaced in upcoming years is not 459. It is actually 570.

In terms of the improvements based on lessons learned, we really learned a lot from Hurricane Michael, which nearly destroyed the northwest division, and also Hurricane Matthew in our northeast division.

In 2022, we were lucky because we were mildly affected by Hurricanes Nicole and Ian. But one of the things that we continue to do is to ensure that we order material early due to the supply chain disruptions that continuously occur these days.

We usually include now record keepers at each of our working locations to better be able to know what kind of expenditures are occurring in the hurricane.

The -- also we would -- we have -- we have seen how other companies use drones to look at their storm, and how much damage has occurred, and we are employing contractors that use drones, and that -- it will help us in the future.

We also continue to increase our security at the staging areas to avoid any issues. And we

continue to invest in storm hardening initiatives, continue also to invest in our technology, as well as our GIS, OMS and implementations.

And at this point, I would like to entertain any questions that you might have. Thank you.

CHAIRMAN FAY: Great. Thank you, Mr. Puentes.

Any questions for Mr. Puentes?

Just one quick question for you. On the -- you do a lot of propane service. What does propane restoration look like? I mean, what sort of damage and impact to customers have you seen?

MR. PUENTES: I am sorry, can you repeat that question?

CHAIRMAN FAY: Your propane service that the utility provides, what sort of damage do you -- is it storage mainly for the propane? Is it -- how are customers impacted, and then how do you, quote/unquote, restore, fix, whatever?

MR. PUENTES: Yes, sir. In terms of the propane, it's -- it's a little bit easier to localize the damage, because usually they will have a tank either at the facilities instead of, like, transmission or distribution wires that we have in the electric side.

And also on the natural -- natural gas, we run

pipes so it's a little more -- but the propane is much easier to deal with because they are very isolated in different areas. Maybe some subdivisions might have a major tank that is in their facilities, and we usually keep track of those major facilities. If it's a whole subdivision that has a big tank, we -- we try to restore those as soon as possible.

But the process of restoring natural gas or propane to customers is quite different than the electric. If -- if you have a problem with a natural gas line, or the division -- subdivision of the propane, there is a problem in the transmission line, all of those customers, you have to go to each individual house and turn on their pilots and verify that there is no leaks.

In the transmission and distribution side, we can put a feeder back on, and then take a look at the taps, and we are able to energize more people quickly, but in the natural gas and propane, it's quite difference.

CHAIRMAN FAY: Do your customers have a higher sense of frustration in those services to be restored?

MR. PUENTES: In which one, sir?

CHAIRMAN FAY: In natural gas and propane, just based on your comparison.

MR. PUENTES: I'm -- I don't really know that, sir. I deal mainly with the electric.

CHAIRMAN FAY: Okay. Great. Thank you.

Any other questions for Mr. Puentes? Seeing none, we will move -- thank you, Mr. Puentes.

MR. PUENTES: Thank you.

CHAIRMAN FAY: We will move to -- I am going to try to get this right, LeMoyne Adams, is that -- is that how we pronounce it?

MR. ADAMS: LeMoyne.

CHAIRMAN FAY: LeMoyne. Oh, okay, I was close. All right. So LeMoyne Adams for OUC utilities.

You are recognized, Mr. Adams when you are ready.

MR. ADAMS: Thank you, Chairman, Commissioners and staff. I really appreciate the opportunity to be here this morning and present to you.

So again, my name is LeMoyne Adams. I have been at OUC for 30 years. Started in the electric distribution engineering department. My responsibilities now include electric and water, electric distribution engineers, electric and water

construction crews, meter operations and service dispatch.

I am going to review our Hurricane Ian experience and response, and how that has helped us with our overall hurricane response and preparedness.

So as many of my colleagues have talked about already, Hurricane Ian presented significant challenges for us, mostly in the flooding arena, but we also had significant wind impacts as well to our system.

So you can see there the significant flooding that occurred in our territory. And again, that presented many issues and problems for our utility. As I said earlier, I have been at the Commission for 30 years, and during that 30-year period in time, we did not experience any flooding of this kind. So this was something very new to us at OUC.

Some of the efficiencies and success factors that we feel helped us through this was we enacted our incident command system five days prior to the storm. We committed to our mutual aid resources very early, and staged those mutual aid resources centrally. Damage assessors were integral and key to our recovery from this storm. And we also

worked very closely with our local jurisdictions on flood mitigation and restoration procedures.

We also have annual hurricane tabletops. We just completed our hurricane tabletop about a month ago. During that exercise, we stressed our distribution systems, our transmission grid, as well as our water system, financial system, billing systems and chilled water. We also tested this year a cybersecurity attack in the midst of a hurricane, which forced us to result to many manual systems. So all of that definitely helps us get prepared for hurricane seasons.

A little bit about planning, operations and resiliency. We are on a three-year vegetation trim cycle for distribution. We trim about 143 miles per year. That's about 1,300 miles total in our system. In 2022, we completed about 94 percent of our planned trim cycle. The reason being we are in the process of converting for from a four-year trim psych to a three-year trim cycle, which we will be complete with that three-year trim cycle in June of 2024.

For transmission, urban areas on an annual cycle, and the rural areas are on a three-year cycle. We have approximately 213 total system

miles for transmission, and we completed 100 percent of our planned trim cycle last year.

We are also on an eight-year pole inspection program for distribution. Annually, we inspect about 6,696 poles. And in 2024, only about 24 of those poles failed inspection.

65 percent of our distribution system is currently underground, and 90 percent of our transmission poles are steel and concrete.

Our transmission and distribution facilities are designed and built for hurricane force winds up to 120 miles per hour. So for Hurricane Ian, our poles weren't blown down due to wind speeds, but rather, they were torn down by large branches and trees. And most were leaning due to tension from tree -- tree limbs on the primary spans.

We also had three water main breaks during Hurricane Ian that required repair and two precautionary boil water notices. No significant damage was -- was done to our production facilities, transmission lines or substations.

Some of our resource highlights during the storm. We did bring in 127 safety inspection resources to conduct damage assessments, and identify any potential issues before crews arrive.

That was the largest number of safety inspection resources deployed for a hurricane impacting our system.

We also utilized 162 mutual aid line techs and 47 mutual aid tree trimming resources, with nearly 400 total resources deployed during Hurricane Ian.

So at the peak of the storm, we had about 97,500 customers out of power. Within the first 24 hours we spent on our feeder restoration process. During that time, we restored about 72 percent of the customers affected.

The next two days, we went into our lateral restoration phase. We established system-wide ETRs within the first 48 hours, and communicated that out to our customers. At the end of the 72-hour period, we reached substantial completion with about 99.1 percent of our customers restored.

The final day of restoration focused on service lateral calls, wire down calls, limb on lines, reinstates and flood related incidents.

So again, with all of the flood challenges that we had, we had about 200 residential customers who were affected by the flooding. We had to develop new flood hazard mitigation procedures for isolating and reinstating our customers, since we

had not experienced this before. It also required a lot of collaboration between our planning, operations, our PIO, the different EOCs and local jurisdictions.

As we all know, logistics is really critical in emergency situations. Prior to 2019, we did not have contracts in place with -- with hotels. We essentially would house our mutual aid crews in hotels, and then shuttle them back and forth to our service yards. We found that to be inefficient. So after 2019, we entered into a contract with Rosen Hotels. That gave us access to about 7,000 rooms between the Rosen Center, Rosen Plaza and Rosen Shingle Creek, and also use of their conference rooms and surface parking.

So with that model, we are able to onboard all of our mutual aid crews at the hotel. Feed them at the hotel. Train them there. Fuel the trucks. Supply them with materials, and obviously, bed them there and demobilize them there from the same location.

So with respect to materials. During hurricanes, we -- we staff up and increase our stock levels similar to that of what we used during Hurricane Charley in 2004. So as far as our -- our

material levels with respect to poles, transformers, wires, they are similar for -- for levels that we used during Hurricane Charley in 2004.

That's kind of the behind the scene numbers there of what we utilized during Hurricane Charley. 3,000 snack bags. 6,900 different meals. 1,380 pounds of laundry was processed. So about 18,000 gallons of gas pumped, and 34, 35,000 inventory items used.

Public information is key and critical, as we all know, during hurricanes. Communication with our -- we communicate with our customers prior to the storm season, then we also communicate with them prior to a pending storm, during the storm, and then post-storm. We utilize bill inserts. We purchase media ads, emails, and we also have a dedicated OUC web page on hurricane safety.

Just before an actual storm hits, communication is -- communication is centered heavily around safety. Shortly after the storm passes, communication speaks to OUC that we are assessing the system, and also emphasizing that the public should stay away from down power lines.

We try to have the entire service area

assessed within 24 to 48 hours. At that time, once we know what's -- what's there and what the damage looks like, we can establish our ETRs, which we try to get done within the first 24 to 48 hours. And then once we obtain those ETRs, we communicate those out to our customers. We also communicate when we are complete with our restoration and then we are returning to normal business operations.

So during Hurricane Ian, we processed about 16,000 outage calls in our customer service area, over 1,200 emails; again, implementing new flood call handling procedures, communicated with our priority customers and key accounts, while also maintaining our billing processes.

So we, again, created these call handling process and procedures, and had to train our call center reps so that they could accurately talk to our customers about those.

We developed and launched a dedicated web page that explained the processes to customers that they would have to take in order to restore service from flooding. You can see they are simple one, two, three, four steps.

We also targeted customers impacted by flooding through alerts and next door. And, again,

promoted safety, water and electricity do not mix.

Lessons learned. Flooding was definitely a key lesson learned. So we are currently reviewing all of our flood mitigation procedures to ensure that we are operating as safely as possible.

We are also changing our mutual aid and response tracking application to help us better track mutual aid resources and internal resources to ensure that we know exactly who is on our system and where at all times.

We are also reviewing our policies related to when it's safe for our safety inspection teams to begin inspecting our system for damage, as well as safe wind speeds for our crews to begin -- to begin working.

We are exploring the use of drones to assist in the damage assessment process. And we are also reviewing our boil water notification processes to our customers in case we have water main breaks, like we did with Ian.

That concludes my presentation. Any questions?

CHAIRMAN FAY: Great. Any questions, Commissioners?

Okay. Commissioner La Rosa, you are

recognized.

COMMISSIONER LA ROSA: Thank you.

And thank you for the presentation. I once lived in the OUC territory, so I am familiar with the flooding issues, and, of course, still have a lot of friends and family in the area, so followed post Ian, the flood, I think, really kind of took everybody by -- by surprise.

Do you anticipate, like, enhanced collaboration with local officials, with their planning departments, them better understanding where maybe your assets are and where your equipment is in the future to either avoid or maybe improve some of the flooding situations?

MR. ADAMS: Yeah, that's definitely one of the items that we -- we captured in our lessons learned as well, trying to understand where those floodplains are, and where, you know, we may encounter those situations happening in the future so we can get kind of get ahead of it next year, and -- and better prepare for something like that in the future.

So that's definitely something that we plan to do, is coordinate better with our EOCs in the City of Orlando, Orange County and the City of St.

Cloud.

COMMISSIONER LA ROSA: Thank you.

CHAIRMAN FAY: Great.

I just had a quick question. Your call-in numbers for Ian are just -- are really high, and then you had sort of, about 1,200 emails, I guess. Is that the primary form of communication that -- that customers prefer, or is it just, you know, you haven't adopted some sort of text message or on-line system?

MR. ADAMS: No. We -- we found that they -- the preferred method is still calling in our IVR system, so they will do that, or -- or -- or emails. We haven't found that they have really gone to, like, social media quite as much, so the preferred method is still just calling OUC.

CHAIRMAN FAY: Okay. Great. Thank you.

Any other questions?

Seeing none, thank you for your presentation, Mr. Adams.

Next we will go to Mr. Ruth and Ms. Ryan for a presentation from Lee County Electric Co-Op.

MR. RUTH: Thank you, Commissioners. We would like to thank you for being here today and giving us the opportunity to present.

My name is Allan Ruth. I started with LCEC in 1985. Spent the majority of my time on the operational side of the business, and am currently the Incident Commander for the LCEC Restoration Team.

MS. RYAN: Good morning, Chairman and Commissioners. I am Karen Ryan. I am the Public Relations Director for LCEC, and I have been with LCEC for 27 years. So I've seen my share of hurricanes. Previous to that, I was with Lee County government, and I also saw some hurricanes there, but I have never experienced anything like Hurricane Ian.

MR. RUTH: LCEC is a member of the Florida Electric Co-Op Association, and one of 16 distribution co-ops across the state, which in total serve 2.7 million members.

LCEC, we serve portions of six counties across southwest and south Florida. We have 235,000 members, 8,800 miles of energized lines, 25 substations and approximately 400 employees, with service centers in North Ft. Myers, Lehigh Acres, Immokalee, Belle Meade and Sanibel Island.

The areas shaded in yellow represent our service territory of the counties that were

previously mentioned.

And storm restoration. So the topic for today is the storm preparation and restoration processes; communication with our stakeholders that Karen Ryan will be going over; system resiliency specific to vegetation management and pole inspections; and lessons learned from the 2022 storm season, specifically to Hurricane Ian.

So we perform annual drills within LCEC. We do tabletop exercises. We incorporate the lessons learned from previous storms, and we also participated in the FEECA statewide tabletop a few weeks ago, and also had the opportunity to be an observer at FPL at their tabletop.

Mutual aid, we have contracts in place to make sure that they are FEMA compliant by June 1st. We also have mutual aid agreements with FEECA, four tree vendors, base camp vendors, and then also 19 linemen vendors, which make up 14 distribution and five transmission contractors.

We increased material levels to anticipate activities throughout the storm season, and we have storm kids that we put together and set aside in anticipation of that the storm that we don't use for anything but emergency restoration.

MS. RYAN: LCEC implements an Omnichannel communication strategy for storm preparedness and response. We start with our employees, and we always focus on safety, but we utilize tools such as email, on-line and phone hotlines, our internet storm center, our subgroup meetings with the restoration team, all of the 200 employees, and then as Allan mentioned, our training exercises.

We also know it's just as important to cultivate our relationships before a storm hits with our vendors, suppliers and contractors.

External communication begins around March for preparedness messaging, and then year round for our tree wise campaign. During an event, we provide twice daily restoration updates in addition to our ongoing messages related to safety and the restoration process.

The tools we utilize for external communications include our website LCEC.net, and our storm center there. Also SmartHub, which is our customer care technology, where members that enroll in the technology can receive alerts, updates, messages and various data related to their bills and hurricane restoration.

We have messages on the back of bills. We

have customer newsletters, and we -- we utilize advertising when we can't.

We also have a comprehensive LCEC hurricane guide that is in digital and print form. And then we participate in pre-storm presentations at civic groups, chambers of commerce. And our vital tool right now, which has changed much since my first hurricane with LCEC with Hurricane Charley, is social media has become a vital tool. During Hurricane Ian, we had a reach of about 10 million stakeholders.

Year round, we have government relations and key account representatives. When there is a storm in our area and an EOC is activated within our service territory, we have dedicated representatives at those EOCs. And then we work very closely, we couldn't do it without the support of our local, and during Ian, national media and social media. We participate in their hurricane guides and provide content related to storm restoration and safety. And then we partner with the media for presentations within our community about preparedness. And then during Hurricane Ian, we held about 250 media interviews throughout the event.

And one thing -- one message that I just wanted to focus on that I am very proud of is that during Hurricane Ian, we had no lost time accidents. And that was with our employees, and also with our mutual aid. That was the good news. Unfortunately, about 25 percent of our employees lost their homes. Some of them are still displaced.

MR. RUTH: So specific to vegetation management, on our transmission system, we do annual visual inspections that we follow up any corrective actions that need to take place. We do reclaim, mostly in our southern rural areas of the system, about 10 miles a year. And we have, in total, about 179 miles of 138 kV transmission.

Our distribution feeders that we have, they are currently on a three-year cycle for three-phase, and a five-year cycle for laterals. This program actually initially kicked off in 2004. And at that time, it was on a six-year cycle for three-phase, and an eight-year cycle for laterals. Through continuous planning and funding and process improvement, we have been able to bring those cycles down to where they are at today.

Transmission -- excuse me, pole inspections on

the transmission, we started hardening program on this, the transmission system, in 2012. And we have been able to bring down our exposure from wood poles to concrete and steel hybrids to the 51 structures that we have remaining, and we do have plans to work them off the system as well.

The distribution system, we target 16,000 poles annually for our inspection. And then poles that will not make it through the next inspection cycle, they go into a prioritization, Priority 2's and Priority 3's. Then we have a targeted pole change-out, where we are changing out about 2,250 poles on an annual basis. And then the Priority 1's that wouldn't -- that were the most severely eroded will be the ones that we change out during that current year. So we change out about 2,500 poles on an annual basis.

And the ratio of poles that we have on the system is about 151,000 wood, 16,000, 17,000 in concrete, and remaining are either steel or aluminum.

Lessons learned that we had, and this is specific to Hurricane Ian. So the plan that we had in place, the plan had been developed since Hurricane Charley, back in 2004 was the first time

we formalized our hurricane restoration plan. And we have incorporated lessons learned through Hurricane Charley and then Hurricane Wilma, and then Ian was a big one just five years ago. During -- excuse me, Irma five years ago.

During Hurricane Irma, we brought in approximately 650 external resources on the system, and the plan was designed to manage about 750.

Through Ian, we actually brought in, our high watermark was about 2,400 resources that were on the system, and with a total of about 3,000 -- 2,700 to 3,000 that came on the system. So we had to manage the additional 600, 700 that came in and had to leave because they rotated in and out of the system. So one of the things we had to do is revamp the plan to be able to manage such an influx of resources on the system.

The other thing is community outreach. So areas where we did an excellent job of managing the community outreach, we had very positive results. And we want to take the lessons we learned in that and incorporate it into other areas and build upon the success that we had in those specific areas.

The other is utilization of contractors and mutual aid outside of the norms. This is where we

always managed resources that came in through hotels. And what we found was, in Ian, we had such damage to the hotel facilities, that we lost a lot of the places that we previously had housed those resources. In addition to other influx of people that were coming in, there was a lot of competition for those hotels. So we are moving to the base camp concept, where you can manage, you know, 500 to a thousand personnel in one footprint. It worked out very well.

The other thing that we did in this event we had never done before, we brought in additional warehouse personnel. It just so happens the benefit from that was that some of those personnel that came in, they were ex-linemen types. We were able to utilize those as storm restoration supervisors -- the industry would call them also birddogs -- to be able to go out and manage the additional resources we got in on the system.

And then also truck drivers. We ran out of truck drivers, qualified truck drivers. We are be going to incorporate that into the plan.

The other thing was the storm itself. So we had managed -- in my career, I have been involved with five major hurricanes, and this one was

different. I believe FPL had mentioned, you know, the size of the storm. Literally Ian and Charley they, made landfall within 100 yards of each other. And the difference, because of the size of the storm, the dynamics of the storm was significantly different.

The wind speed was about the same. We saw the wind damage in Charley. Although, in Ian, it was wider spread as a result of the size of it. But the thing that is real and, you know, we all need fob aware of it is the storm surge. It was significant.

So if you look at places like Sanibel, Ft. Myers Beach, they got anywhere from probably 14 to 16 feet of water in certain areas. Pine Island got probably five -- three to five feet of water across from the center south. So it had a pretty significant impact.

And with that, last but not least, you know, us being ground zero in the event is a pretty -- it's a pretty humbling experience. And we have a lot of thanks that we would like to pass out. You know, first and foremost, was Governor DeSantis with his support throughout the event. Him and his staff, they opened up access to things that we had

never had before that were very helpful to our members, and the local area.

Also, Director Guthrie, he was directly involved. Had a lot of conversations and communications with him. Through him and the Department of Transportation, they were able to restore road access to Pine Island and Sanibel, which greatly improved our ability to be able to move resources over to those islands and expedite restoration activities.

The Public Service Commission, specifically Robert Graves. Karen had mentioned, you know, 25 percent of our employees lost their home. And Robert, he knew that, and truly a compassionate thing. He reached out to me and Karen on multiple occasions trying to understand, you know, how we were dealing with it, how our employees were holding up. So very -- very humbling, but very appreciative in -- in the moment.

The Florida Department of Emergency Management, one of the things that in the past we've had to deal with is the FEMA reimbursement and the impacts of these events, especially on cooperatives, nonprofits, municipalities, things of that nature. It was an enormous financial impact.

And I will tell you that they have done an exceptional job of streamlining the process, and really helping out and -- and working with us on reimbursements, which has helped our organization immensely.

The Florida Electric Co-Op Association, they were instrumental from the -- from the beginning of helping us out, you know, providing resources, assistance. They continue to be there for us. A great organization.

All the co-ops that came in to help us from eight different states, tremendous effort. Again, you know, a drop of a hat, they were here and they helped out.

And I can't say enough about Duke Energy and FPL with the direct support that they gave us with personnel, materials, expertise, whenever it was needed. They were there day and night until we got through the event.

So really, I will tell you, this was a team effort. It really says a lot about the state of Florida and all the utilities that are represented within.

And that concludes my presentation unless there is any questions.

CHAIRMAN FAY: Great. Thank you.

Any questions for our speaker?

Commissioner La Rosa, you are recognized.

COMMISSIONER LA ROSA: Thank you, Chairman.

And thank you for the presentation, and certainly, obviously, you know, the eyes of, not just Florida, but the nation were -- were on Southwest Florida.

How -- how was the morale post-storm and how is the morale today of the community?

MR. RUTH: Morale is good, you know. I will tell you that of the employees that were most impacted -- all the employees were impacted, some were more severely than others. They were there day and night. And it's a -- it's difficulty a pride thing, and it -- it showed throughout the event, and it still continues to show.

You know, we are as busy now as we've ever been, and, you know, everybody is up for the challenge and moving forward and working through the recovery effort that we have, not only with our system that is ongoing, but also with the community itself.

COMMISSIONER LA ROSA: Well, thank you, and certainly pass on our thanks and dedication to all

the hard workers that are on the ground. Thank you, guys, for the presentation.

MR. RUBIN: Yes, sir. Thank you.

CHAIRMAN FAY: Great. Thank you.

And thank you both for -- for being here. I think at times in this role, we -- we -- particularly I opened the statute books and look at jurisdiction of IOUs, and municipalities, and co-ops, and our role in all that.

But I think your example with Robert Graves, who is a part of our team, is a really good one, because at the end of the day, we are all part of Florida, and I think seeing that other IOUs were engaged with you, the Governor and his team were engaged, and I could here in your voice, Mr. Ryan, how impacted your community was, and still is impacted to this day.

And so I appreciate you taking the time to be here and tell your story, because I think we are committed to doing what we can within our authority to support restoration and preparation for these entities, but -- but you are really ones on the ground who have to that -- that work and communicate with your constituencies, and so I really appreciate the -- the work that you are

doing, and truly thank you for supporting your -- your constituents, so thank you.

MS. RYAN: Thank you.

CHAIRMAN FAY: Commissioners, with that, seeing any other comments or questions for Lee County? Nope.

All right. Well, next we will move on to -- thank you again.

MR. RUTH: Thank you, Mr. Chairman.

MS. RYAN: Thank you.

CHAIRMAN FAY: Next we will move on to our last presenter this morning, which will be Mr. Bitz from Lumen Network.

And it's Bitz, correct?

MR. BITZ: Bitz, correct.

CHAIRMAN FAY: Okay. Great.

MR. BITZ: Good morning, Commissioners and staff. Thanks for including Lumen in this.

Now, I think one of the things I want to recognize some of the utility partners have said that Florida is leading the country in disaster preparedness and recovery. I was recently on the west coast, and myself and some of my partners in the telecom providers was recognizing Florida for their preparedness. You know, from the EOC

preparations to meetings like this, it really does make a difference.

And then I think, you know, it goes without saying, but partnership is -- is number one. When you look across from my electric partners and telecom, there really is a partnership between us.

My name is Brent Bitz. I lead the business continuity management globally for Lumen, and the Network Control Center, which is an overlay of all of our operational teams.

So Lumen technologies, it might be a new name to you, but Lumen, we are dedicated to furthering human progress through technology by connecting people, data, applications, quickly, securely and effortlessly.

Lumen Technologies is an overlay company of Lumen, a fairly new name, Quantum Fiber and our traditional brand, CenturyLink, which still does exist.

Business continuity. If you look at business continuity for Lumen, it's really on a plan, do, check and review. We aim to safeguard employees, number one. And then how do we plan and recover from a major incident? Try to prepare and recover before it impacts us, but if it does impact us, how

do we recover quickly?

The first part of the plan -- I am not going to read through all of these, but the first couple is the corporate program. It is a corporate program. It's an overlay, making sure we have the resources, the training and the business preparedness wherever it is in the -- in the world to recover.

For pre-season checks, we had our pre-season check. It's really -- we do this all year now, but pre-season, our kickoff was May 11th. We brought all the teams together, walked through the preparedness and make sure that we are prepared for the hurricane season.

We participate in ESF2s cross the country in addition to the Florida region. Understand the risk areas. One of the things that we've identified and implemented is geospatial network assets map. Really what that is, is overlaying all of our people, our assets, our poles, everything on an Esri overlay map. So as we prepare, we can go better prepared for our people right outside that area, and equipment right outside that area as well, and know what we need as the storm progresses.

Our field and center teams are diversified. You know, obviously, we have feet on the ground, and we will bring people in from all over the country to support that. We will utilize contractors from other telecom providers too. It's really telecom providers come together and work together on the plant where we can.

And then our data centers are diversified in Florida and across the U.S., because all of our data centers, we need them up and available, especially in disaster situations.

Our incident management team consists of an incident commander, business unit leaders throughout the business, health and safety, government affairs and corporate communications. It's really an all-hands-on-deck.

And then when we talk about do, you know, the exercises, and live events, and event management functions, that's something that we do all day, every day. And we communicate with customers, our enterprise customers, we communicate with them at least every hour that we have an update. And it really enables us that practice in do when we do have a disaster, it's muscle memory to react and -- and recover.

When you look at prioritization, it's power in fiber, number one. After power and fiber, we look at TSP, government, emergency services, other utility providers. And I will just call out cell phone providers are at the top of that list as well. We know that, as landline, peoples, you know, houses are affected, they utilize and rely on cell phone communication. So we've got a very good partnership with all of our cellular providers to make sure that we've got service to their cell phone; or if they don't utilize CenturyLink and Lumen, how do we partner with them and get service to them so they can serve customers?

Some information -- before I go to this slide, just on poles. We've got 39,000 poles in Florida. We inspect just about 5,000 poles annually. Many, like the other providers, are on an eight-year cycle.

Last year, we had 244 poles that were failed. We repaired 164 poles, and replaced 80 poles. And annually, we are on a cycle of 235 miles of vegetation trim each year.

And this is disaster preparedness as we get to the storm, as our storm watchers are looking at things off the coast. Six days prior to the event,

we will bring together a small team of stakeholders, critical infrastructure and plant engineers. And then as we get closer, usually it's when the storm gets named, two to three days pre-event, we will bring together that incident management team that I discussed before to pull together.

And then as we go through, we will pull in additional resources throughout the company to make sure the company is there to support anything that we need from a disaster recovery standpoint.

And then maintain and review. Some of the things that we are doing, but always look out one, three and five years, but we partnered with CISA and AT&T on the affects of climate change. Based on that, it's on a seven-kilometer by seven-kilometer basis to not only look out short-term, but to look out long-term, 15, 20 and 30 years, and start investing in infrastructure that we need to -- to accommodate those climate changes.

For Hurricane Ian, I mentioned we focused on safety and people being priority. Clear prioritization drove a response. We utilize disaster recoveries in addition. We had a local

command and logistic center. This was a lessons learned from a storm that actually impacted Pennsylvania a few years ago, but set up a logistics center and brought in logistics engineers from our corporate warehouses throughout the country. It made everything run much, much smoother.

Our core network recovered quickly. Our core network fiber-based, usually based on ring architecture, so diversity architecture and recovered quickly. Residential neighborhoods with the devastation, there were extended outages.

We communicated with our customers by hourly email statuses for enterprise customers. We set up WiFi hotspots. And on our call center, we set up messages on our IVR, and pushed status messages via the appli -- mobile app to our customers.

For lessons learned, partnership was critical. We continue to leverage and strengthen those partnerships, leverage private sector resources, barge getting to the islands, in addition to public sector government resources.

Collaboration with power -- power companies and meter information being available. This might seem like something very, very simple, but meter

information -- so we are talking apples and apples to our electric partners, and making it easily accessible by all employees, that was critical, and that's now available.

Access letters remain important. FEMA access letters, and I know Florida is working on state access letters. But as we bring people in that don't have necessarily the CenturyLink branded vehicles and badges, that's where access letters remain important. So kudos to Florida for doing that.

And then we are digitizing and mapping impacts. Where we deploy resources often depends on where we have fiber cuts, where we have utility poles down, and where we don't have power. So the automatic updates of where we need to deploy resources, and as things change rapidly, that's been critical.

That's all I have. Any questions?

CHAIRMAN FAY: Great. Thank you.

Commissioners, any questions?

Commissioner La Rosa, you are recognized.

COMMISSIONER LA ROSA: Thank you, Chairman.

Just out of curiosity, do you see -- is there a different reaction to maybe some of the more

rural -- customers in more rural territory, consideration to the more urban areas, maybe where there is not fiber specifically?

MR. BITZ: Yeah. There is -- where we don't have fiber in those rural community, they are often served by copper. So we do look at the speed to restore that copper, and what would it take to overlay that and pull fiber in and upgrade our plant while we recover.

COMMISSIONER LA ROSA: Thank you.

MR. BITZ: Yep.

CHAIRMAN FAY: Thank you, Commissioner La Rosa.

All right, Commissioners, seeing no other questions for Lumen, thank you for your presentation.

I did before -- just before we conclude, want to make sure we don't have any comments for our presenters.

Yes, we will go, Commissioner Clark and then Commissioner Passidomo.

COMMISSIONER CLARK: Thank you, Mr. Chairman, just a couple of observations.

I thought I would just wait until everyone finished their presentation to make a few

observations, but I especially wanted to acknowledge the -- the relationships that I think have been built here, and I want to acknowledge Lee County for the collaborative efforts that they've made with the investor-owned utilities in -- in working some mutual aid.

I know Mr. Bjorklund has been an instrumental part of that as well, and I want to thank him for a leadership role he has played in helping to bridge that gap. This is an issue that I addressed very early on in my career here at the Commission, that I thought it was essential that we begin to work on and fix this mutual aid between munis, co-ops and IOUs.

And I know there is still some liability hurdles that we are -- we are focusing on. My OUC friend there is nodding his head yes, so I -- I certainly see there is still some potential there for us to do some positive things, but I think this is a really, really good first step. This is something that is a little bit unusual in the past, and I am very, very happy to see that.

But I wanted to just pose a question to each person that's made a presentation here today. A friend of mine told me once that his greatest fear

was the question that he was asked in the boardroom one day, and that was what keeps him up at night. And you guys have done a tremendous job sharing with us what you have done to prepare for the upcoming storm season. I have personally witnessed the preparation efforts that go into this, and my hat is off for all of the planning involved. But I just want toking to see if we can help in identifying where we have any potential deficiencies.

And my question to you guys is: Knowing what's coming ahead in this year, outside of the size of the storm, what keeps you guys up at night? Is there any potential looming issue that we, as the Commission, can help to address? Are there any hurdles that you have seen in the past that you still don't think we have resolved? And even just get down to the -- the -- the most micro point, if you would, just what are you most concerned about if we had a storm that could go wrong?

Someone mentioned a cyber attack during a storm. I will be honest, that never crossed my mind. That's -- that's the first, you know, the first time I have heard that. And I think that's an amazing -- an amazing amount of effort going

into making that kind of planning.

But are there other logistics that you have the highest concern about? You may not think it's a problem, but it's your biggest concern. And I am going to open it up to anybody that's got the guts to answer that question this morning. Your bosses won't get mad at you. I promise. You can answer it.

CHAIRMAN FAY: Go ahead, Lee County.

MR. RUTH: Yes, Commissioner, I will start it off.

The one thing that, thank goodness we didn't have too deal with, was during COVID. So if we very a pandemic and we have a major restoration, the separation that has to be required and all the logistics that go into it would exponentially complicate those restoration efforts.

So ideally, it's behind us, and it's not COVID but it is something we have to plan for. It could be a flu. It could be something, who knows, but that is -- you know, looking back, you know, we thought we were prepared going into it if we had a pandemic, but looking at the effort that we had to go through with -- with Ian, it would be extraordinary to do those restoration efforts.

MS. RYAN: I would just tag on to that, Commissioner Clark, is -- and we all mentioned it, was supply chain. I think even during blue skies, that we are concerned with that now. So add a storm, or two storms to that, it is -- it keeps me awake at night.

MR. ADAMS: Yeah, I will -- that's exactly what I was going to say, the supply chain. Even though we have increased our stock levels, I think, Mr. Chairman, you mentioned what if we have multiple back to back to back storms, and with the supply chain issues that currently exist, we are all aware, trying to source those materials and get those in for our customers keeps me up at night.

MR. PANKRATZ: I will add to what you said for the cyber. That's something that we actually drilled on last year during our annual storm dry run, we added in the cyber element. So in my role, I am responsible for preparedness for our company for all hazards. We've actually got a cyber drill coming up next month that we are doing, and to think about how vulnerable we are during a hurricane restoration, to have something like that that would impact our systems is definitely something that -- that keeps us up at night.

MR. MORA: I would say for Tampa, the direct hit coming up Tampa -- Tampa Bay for a Category 4 or 5 and the associated storm surge of witnessing what happened down in southwest Florida, and would hope that our customers would actually evacuate for their safety. And then the following that, of just kind of the safety of the restoration for our workers and for the community.

MR. HASLETT: So in my role, I focus a lot on staging and logistics. Something that keeps me up at night is our staging site review process is very iterative. We see it becoming more cumbersome to acquire large sites in our heavily populated and dense areas, Pinellas, Pasco. We are working to try to convert some of our Duke Energy owned property to staging sites, but that is something that, you know, we often think about, you know, we need to make sure that we have adequate staging to bring in a large number of off system resources.

MR. PUENTES: Commissioner Clark, I think the thing that worries us the most, being that we are a very small utility, is something that a direct hit Category 5, Category 4, or something similar, like what happened in our northwest territory with Michael on the island, that if a Category 5, or

something like that hits our island, it would be destroyed, and there is almost anything that you can do to stop that. That, I think, is the biggest worry for us.

CHAIRMAN FAY: Any follow-up, Commissioner Clark? No, great.

Commissioner Passidomo, you are recognized.

COMMISSIONER PASSIDOMO: I promise, I don't have any existential questions for you. Mine is more just sincere gratitude to all of you in the work that you do.

I said this last year after Hurricane Ian, I am from -- I grew up, born and raised in Naples, so to see it hit your community like that, it really -- it was pretty overwhelming because, you know, you just -- like I said last year, you know when you grow up on the coast it's possible, but when it does, you know, destroy your childhood home, it's -- its -- it's a pretty emotional experience.

So when I went down, I had the opportunity to go and visit an FPL staging site. It was just incredible operations to see, it really -- it was like almost militaristic in its -- in the procedures that you executed, everybody really knew their -- their positions, and it was just amazing

to go see, and that's why I think we see such -- such quick restoration efforts, is because of these lessons learned, and you have take taken in and you deploy it every single year.

And again, another south out to Lee County. I mean, I -- we -- I flew over -- and you can still see, you know, as you know, those blue tarps are still there, and they are less every single -- every single time I do it, but they are still there, and so I am sure that is a challenge you will have this season, is those -- those homes that are still currently being fixed up that, you know, they are -- they are very vulnerable right now, but you all did an amazing job. And the community outreach that happened after the storm was -- it just -- it really restored my faith just to see how much -- how everyone came together, and is still coming together. And so I just really appreciate all of the work that you all are doing. So thank you.

CHAIRMAN FAY: Great. Thank you, Commissioner Passidomo.

Commissioner La Rosa, you are recognized.

COMMISSIONER LA ROSA: Thank you, Chairman. And I will be very brief.

You know, I -- I -- I would say thank you for the willingness to continue to get better. I think the Chairman started and opened by saying at NARUC, we look at Florida as -- as -- as being really good in hurricane response, but every year when we have these presentations, there is always a lesson learned, whether it be have from a storm or whether it be from something else that -- that impacted us.

So I want to say thank you to all of you guys, and certainly take that message back home, that we appreciate you guys continuing to dig through things, and look at the details, and look at the information, and finding ways to ultimately get better, because that's just going to help, of course, every one of our customers as restoration becomes reality after a storm, so thank you all.

CHAIRMAN FAY: Thank you.

All right. Commissioners, seeing no other comments, I would echo the thank you for your time for all of you for being here today, and this will conclude our commission workshop on the 2023 Hurricane Season Preparedness. Thank you again.

(Proceedings concluded.)

CERTIFICATE OF REPORTER

STATE OF FLORIDA )
COUNTY OF LEON )

I, DEBRA KRICK, Court Reporter, do hereby certify that the foregoing proceeding was heard at the time and place herein stated.

IT IS FURTHER CERTIFIED that I stenographically reported the said proceedings; that the same has been transcribed under my direct supervision; and that this transcript constitutes a true transcription of my notes of said proceedings.

I FURTHER CERTIFY that I am not a relative, employee, attorney or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorney or counsel connected with the action, nor am I financially interested in the action.

DATED this 7th day of June, 2023.

DEBRA R. KRICK
NOTARY PUBLIC
COMMISSION #HH31926
EXPIRES AUGUST 13, 2024